

## C L A I M S

We Claim:

- 5 1. Medical or dental-medical treatment instrument comprising a media line, in particular for water or spray, extending from its rearward end to its forward end region, in which line an exchangeable filter element is arranged,
- 10 wherein,  
the filter element has the form of a filter sleeve and the direction of passage of the medium is directed transversely to the sleeve wall.
- 15 2. Treatment instrument according to claim 1,  
wherein,  
the filter element is arranged in a filter cartridge which is releasably connected with associated sections of the media line.
- 20 3. Medical or dental-medical treatment instrument comprising a media line, in particular for water or spray, extending from its rearward end to its forward end region, in which line an exchangeable filter element is
- 25 arranged, and a rearward connection part and a forward handpiece, which are releasably connected with one another by means of a plug coupling,  
which is formed between the connection part and an insert part in the handpiece, which is connectable with the
- 30 handpiece by a connection sleeve, which sleeve can be mounted from the rear and removed to the rear, and which insert part is, with the back connection sleeve rearwardly drawn, axially displaceable between a rearward

mounting intermediate position and a forward end position, wherein, there is arranged in the forward handpiece part and/or in the insert part a free space the lateral opening of which is covered over by the mounted connection sleeve and is opened with the connection sleeve drawn back, and in that a filter cartridge mountable in the media line can be put in place, and again removed, through the opening into the free space.

10 4. Treatment instrument according to claim 3, wherein, the filter cartridge has a filter element in the form of a filter sleeve, and the direction of passage of the medium is directed transversely to the sleeve wall.

15 5. Treatment instrument according to claim 2, wherein, the filter cartridge is connected by plug connections with the associated sections of the media line.

20 6. Treatment instrument according to claim 5, wherein, the media line extends through the insert part and the up-stream plug connection is arranged between the filter cartridge and the insert part.

25 7. Treatment instrument according to claim 1, wherein, the filter cartridge has a filter cartridge housing at the ends of which there are arranged plug connection parts, e.g. a plug pin having a through channel and a plug recess.

8. Treatment instrument or filter cartridge according to claim 7,

wherein,

the plug pin is smaller in its cross-sectional size than  
5 the cartridge housing and is connected with the circumferential wall of the cartridge housing by means of a housing end wall.

9. Treatment instrument according to claim 7,

10 wherein,

the plug recess is formed by means of a circumferential wall of the cartridge housing.

10. Treatment instrument according to claim 2,

15 wherein,

the filter sleeve stands up, in the longitudinal direction of the filter cartridge, from a filter carrier which has a through channel connected with the inner space of the filter sleeve and is connected with or  
20 placed into the circumferential wall of the filter cartridge, the end of the filter sleeve away from the filter carrier being closed by means of an end wall.

11. Treatment instrument according to claim 1,

25 wherein,

the filter sleeve has a plurality of through-holes in a plurality of transverse planes arranged axially one behind another, and preferably in each case a plurality of through-holes are arranged distributed over the  
30 circumference.

12. Treatment instrument according to claim 2,  
wherein,

the filter cartridge stands under a laterally outwardly  
directed spring tension, which upon its dismounting  
5 displaces or tilts the filter cartridge outwardly, in  
particular upon pulling apart of the instrument parts or  
handpiece parts.

13. Filter cartridge for a treatment instrument,  
10 comprising a tube-shaped cartridge housing in which a  
filter element is arranged,  
wherein,

the filter element has the form of a filter sleeve and  
the direction of passage of the medium is directed  
15 transversely to the sleeve wall.

14. Filter cartridge according to claim 13,  
wherein,

the filter cartridge has a filter cartridge housing at  
20 the ends of which there are arranged plug connection  
parts, e.g. a plug pin having a through channel and a  
plug recess.

15. Filter cartridge according to claim 14,  
25 wherein,

the plug pin is smaller in its cross-sectional size than  
the cartridge housing and is connected with the  
circumferential wall of the cartridge housing by a  
housing end wall.

16. Filter cartridge according to claim 14,  
wherein,  
the plug recess is formed by means of a circumferential  
wall of the cartridge housing.

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17. Filter cartridge according to claim 13,  
wherein,

the filter sleeve stands up, in the longitudinal  
direction of the filter cartridge, from a filter carrier  
10 which has a through channel connected with the inner  
space of the filter sleeve and is connected with or  
placed into the circumferential wall of the filter  
cartridge, the end of the filter sleeve away from the  
filter carrier being closed by an end wall.

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18. Filter cartridge according to claim 13,  
wherein,

the filter sleeve has a plurality of through-holes in a  
plurality of transverse planes arranged axially one  
20 behind another, and preferably in each case a plurality  
of through-holes are arranged distributed over the  
circumference.